

Abstract

A rotary injection molding apparatus and method for manufacturing products containing elastomeric material within multi-section single cavity molds. The apparatus includes a modular frame supporting an injection molding operation station having an injector assembly with a pressure sensitive nozzle assembly. The injector assembly is engaged with an extruder assembly at a check valve assembly. A mold servicer assembly is provided for assembly and disassembly of multi-section single cavity molds. A robotic arm assembly is supported on the modular frame and positioned for inserting and removing products or product components from disassembled molds. Finally; a rotating table is provided on the frame which has a plurality of work station positions supporting clamping assemblies for clamping single cavity molds around the periphery of the rotating table.